CAPSTONE INDUSTRY COUNCIL MEETING MINUTES August 9, 2006

The Alaskan Capstone Industry Council met at the Alaska DOT/PF Building on August 9, 2006, at 8:00 am.

The following agenda items were presented:

0800 – 0945 Information Sharing

Opening	Sue Gardner
Operational Status Update	Ray Collins
Technical Status Update	Clint Bateman
Expansion of the ADS-B Surveillance Service Area	Lari Belisle
Conoco Phillips Capstone Update	Dennis Parrish
Capstone Coalition Status Update	Felix Maguire
Surveillance Broadcast Services (SBS) Overview	V. Capezzuto
Using ADS-B Data for Search & Rescue	Kimo Villar
WAAS Update	JoAnn Ford

0945 – 1000 Industry Feedback (Round Table)

Information Sharing

Opening:

Sue Gardner, Capstone and Weather Camera Programs Manager, opened the meeting by introducing Vincent Capezzuto, Surveillance and Broadcast Services (SBS) Program Manager. Mr. Capezzuto relayed that his Alaska visit had been productive. He stated that he was very impressed with the local public knowledge of ADS-B and hopefully, would be able to leverage this experience at a national level.

The Request For Information (RFI) for Phase III avionics was posted on July 17, 2006, and will close on August 24, 2006. To date there has been positive feedback, with 22 companies requesting information. The results of this solicitation will be briefed at the next Industry Council meeting.

Capstone has funded the development of an Avionics Installation Technician Training Syllabus to be developed by the National Center for Aircraft Technician Training (NCATT), in conjunction with Aviation Electronics Association (AEA) and University of Alaska, Anchorage (UAA), to train avionics installers for Phase III avionics equipage. UAA anticipates providing this training, beginning in November 2006, as a one-semester course with 20 initial students. Activities will be coordinated between the UAA campus and the University of Alaska Fairbanks (UAF) campus. Sue Gardner noted that any accredited college would be able to teach these courses. The courses have not been marketed at this time. It is expected that the Part 145 Repair Stations will help with advertising. Sue Gardner stated that said she would work with Joette Storm (FAA Public Affairs) to develop and coordinate a press release.

Leonard Kirk reported that he would be traveling to Kansas City, Missouri, August 14-16, 2006, for an AEA and NCATT conference to help set national avionics installation standards. Paul Fiduccia stated that Avionics Repair Stations should be interviewing applicants now.

Sue recapped Russ Chew's (FAA/COO) recent visit, which she characterized as "very positive."

Sue reported that Pat Poe's retirement was well attended and that he proved to be a great supporter of Alaska aviation and all of the safety initiatives, such as Capstone. He will be sorely missed.

Sue and Vincent Capezzuto discussed the Service Level Agreement (SLA) between Capstone and the SBS Program Office. The SLA will provide positive solidarity between these two organizations and should add momentum to Capstone's Phase I and II GBT operational status, as well as Phase III initiation and National ADS-B deployment.

Worth Kirkman (MITRE) described cost/benefits of Capstone Phase III and how they were derived with 51 Alaska airports receiving instrument approaches. Calculations centered around three criteria: airport operations, preventable accidents, and the busiest contiguous airways.

Worth Kirkman reported that the baseline services for GBT coverage using the above referenced criteria showed <12% of residual density not covered by the

proposed GBT locations, and that 91% of the accidents were covered <5000' AGL. Low altitude benefits of using WAAS with reduced MEAs were not included.

Sue Gardner stated that a FAA JRC pre-brief to the FAA Executive Council would occur in Washington, D.C., on September 12, 2006. The FAA JRC to provide a Final Investment Decision of Capstone Phase III is scheduled for September 20, 2006.

Operational Status Update

Ray Collins reported that a more detailed schedule of Chelton's 6.0B software upgrade was provided by Gordon Pratt. Steve Thompson confirmed the strong confidence in an April 15, 2007, release date. Ray went on to say eleven more Phase II helicopter installs are pending.

The follow-on installation contract with AcroHelipro has been established. It will include ten more helicopters with Garmin, and possibly ten more fixed-wing airplanes with Chelton equipment.

Flight Explorer is presently being distributed to SE operators. There is an ongoing evaluation of the accuracy, timing, and integrity of the display of traffic.

The Juneau ATCT display is on-track for a September 30, 2006, implementation date.

Tom George asked when the Bethel Approach Control Facility would be available. Vincent Capezzuto advised that Howard Swancy, FAA/ADA-002, was the POC and was working this issue. Paul Fiduccia added that Howard was enthusiastic with the support other state have with ADS-B, e.g., Colorado, where they look at the economy benefit in various business models across numerous industries--and not just aviation.

Technical Status Update

Although the formal letter from FAA/AOV had not yet been received for "official" activation of the King Salmon and Dillingham operational GBTs, it was anticipated that it would be forthcoming. Sue Gardner reiterated that this would be the first ATC ADS-B/radar five-mile separation region within the NAS.

Sue acknowledged that it had been a great team effort between Capstone, ZAN, WSA, and the FAA Headquarters Team to get the five SW Alaska GBTs certified as operational, adding that this was the first case where ADS-B and radar traffic were being separated by ATC by five nautical miles. Sue expressed thanks specifically to John Lane (ZAN), Lari Belisle (ZAN), and Jim Hill (Capstone

Program Office). She mentioned, and Vincent Capezzuto confirmed, that these "baselined" GBTs and the data they provide would greatly assist with the operational "turn-on" of the remaining SW and SE Alaska GBTs. Mike Pannone (Medallion) asked if these separation standards would be reduced. Mr. Capezzuto stated it was being considered.

Expansion of the ADS-B Surveillance Service Area

Lari Belisle reported that the ATC ADS-B surveillance box in SW Alaska has been expanded to include Dillingham and King Salmon, and that the altitude ceiling was raised to 10,000 AGL. Within this area, ADS-B has been identified as the primary surveillance source and there have been no traffic conflicts since June 15, 2006. There have been nine conflicts outside of this box. Some of these conflicts are resulting from an ADS-B/primary target bonding issue (with the secondary target within range of a Minimally Attended Radar {MAR}). Lari stated that ATC was currently working on this problem.

Conoco Phillips Capstone Update

Dennis Parrish relayed that Conoco Phillips was very appreciative of the work that Capstone had done to get WAAS availability increased in the North Slope region. He noted that Conoco Phillips had spent hundreds of thousands of dollars to develop increased availability to their airports, based on the improved WAAS coverage. Dennis stated that he had several IOU's to Capstone (particularly antenna locations and heights around these airports), and that he would try to provide this information within a week or so. Dennis also mentioned that they carry out approximately 2,000 operations a month at their major airports and that the activity was increasing. For any requested landing permits, Conoco Phillips will be encouraging aircraft to have ADS-B on-board. Dennis stated that Class E would be going in for much of the North Slope over the next few years and more control would be needed for low-flying aircraft.

JoAnn Ford offered that by April 2007, a major improvement in WAAS capability would be evident in the North Slope region.

Capstone Coalition Status Update

Tom George stated that the Alaska Air Carriers Association developed a draft Alaska Statewide Aircraft Safety Equipage Program, which has been reviewed and approved by the Alaska Air Carriers Association. All other organizations are reviewing the document and will provide their recommendation by August 31, 2006. They are looking for the FAA JRC decision prior to aggressively soliciting for Phase III avionics funding.

Surveillance Broadcast Services (SBS) Overview

Mr. Capezzuto outlined the SBS organizational structure and discussed the emphasis to increase FAA services beyond 2025, especially air traffic surveillance, with the anticipated NAS traffic and passenger growth from 1.5-3X greater by 2025. At around twice the current volume, AT services start to break down. They are working with the Joint Development and Planning Office to develop a shifting business case that includes user cost benefit for funding in addition to current ticket tax revenues. This is especially critical with the anticipated growth of the Very Light Jet (VLJ) segment. Mr. Capezzuto stated that with these new technologies the NAS has become more adaptable to evolutionary changes. With the recent administrative changes within the FAA, a re-focusing has occurred on who the customer is. Previously it was AT, but now the FAA ATO has recognized it is the aviation user. The FAA is now a performance-based organization, with the customer participating.

SBS falls under the En Route & Oceanic Services unit even though ADS-B is a national program that covers many lines of business. This has taken ADS-B from an R&D program to an implementation services unit with Earned Value, with a Program Management Plan with a charter, and committed FAA stakeholders. SafeFlight 21 continues to be a successful R&D program that SBS will expand upon and then refresh the equipment for a uniform presentation throughout the NAS. Interfaces will be designed for each of the automation platforms for NAS-wide deployment and separation standards prior to the In-Service Decision in the fall 2010 timeframe. The advantage of ADS-B is it is a common system that is readily adaptable to any automation platform.

Mr. Capezzuto stated that SBS has a dual track approach: 1) ground infrastructure with an RFO in March 2007 and in July 2007 for a 15-year contract award, and 2) avionics rulemaking with a NPRM in September 2007 and final rulemaking in 2010, mandated by 2020.

Using ADS-B Data for Search & Rescue

Kimo Villar answered the question poised previously by the industry regarding the use of ADS-B for Search and Rescue (S&R). He stated that, as in most cases when a flight plan is filed, the FSS looks at the destination first to initiate S&R procedures. If the pilot does not state that he/she has ADS-B, the FSS will not know to use that information. Kimo recommended that the pilot state that they are equipped and provide their ICAO hex code, which will then allow the FSS to initiate the search using surveillance records at the Center. This will reduce the time before a rescue can start. Kimo also stated that the FSS in Phase I will update their Master Flight Plan database to include if the aircraft is ADS-B equipped, along with recommending that pilots state if they are equipped with

their hex codes when they file a flight plan. In Phase II, the FSS will use a national database that lists all aircraft with ADS-B. Tom George concurred that emphasis needs to be placed on the pilot to file this information if he/she is equipped; however, more information needs to be available before specific instructions are given to the pilot.

WAAS Update

JoAnn Ford provided a briefing on the status of WAAS, noting that the four Alaska WAAS Reference Stations are operational. Data is being collected and analyzed at the Tech Center. It is anticipated that the NOTAM for Anchorage will be cancelled in October that precluded the three LPV approaches in Anchorage and two LPV approaches in Homer due to this increased availability after flight check. Other areas (about 25 airports) will be addressed later.

Round Table

The Arctic Aviation Conference will be held in Winnipeg from November 8-10, 2006. More information will be provided at future meetings.

Tom George stated that the Alaska Aviation North Expo would be held in Fairbanks during October 19-21, 2006, and that a Capstone Phase III briefing might be a good idea. Sue Gardner concurred. Details will be worked out later.

Dick Harding and Karen Casanovas mentioned the Air Carriers Association dinner on Friday, August 11, 2006, at the Hilton Hotel, with Michael Durant as the keynote speaker. The purpose of the dinner is to present the Medallion Awards.

Conclusion and Next Meeting

The Capstone Industry Council meeting was adjourned. The next meeting is scheduled for 8:00 a.m., Wednesday, September 13, 2006, at UAA Aviation Technology Center, 2811 Merrill Field Drive, Anchorage, Alaska, Room 245.